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LIST OF PUBLICATIONS ON

PARTICLEBOARD  
AND PANEL PRODUCTS

This list includes publications that present the results of research by the Forest Products Laboratory in this particular field of wood products research.

Single copies of the various items may be obtained free upon request from the Director, Forest Products Laboratory, Forest Service, U.S. Department of Agriculture, Post Office Box 5130, Madison, WI 53705. Classroom quantities are not available because of limited printing and storage facilities.

| Title   | : | Author  | : | Publication and date                     |
|---|---|---|---|--|
| Effects of layer characteristics on the properties of three-layer particleboards. | : | Geimer, R. L., & Montrey, H. M., Lehmann, W. L. | : | For. Prod. J. 25(3): 19-29. 1975.        |
| Effect of rate of loading and duration of load on properties of particleboard.    | : | McNatt, J. D.                                   | : | USDA For. Serv. Res. Pap. FPL 270. 1975. |
| Humidity effects on properties of structural particleboards from forest residues. | : | McNatt, J. D.                                   | : | USDA For. Serv. Res. Pap. FPL 267. 1975. |

| Title   | Author   | Publication and date  |
|---|--|---|
| Investigating methods to evaluate impact behavior of sheathing materials.                                       | :Superfesky, M. J.<br>:<br>:<br>:                                      | :USDA For. Serv. Res. Pap.<br>:FPL 260, 1975.<br>:<br>:<br>:                              |
| Grain angle through flake thickness: Effect on properties of a structural flakeboard.                           | :Heebink, B. G.<br>:<br>:<br>:   | :USDA For. Serv. Res. Pap.<br>:FPL 257. 1975.<br>:<br>:<br>:                              |
| Dry-formed, medium-density hardboards from urban forest materials.  | :Laundrie, J. F., &<br>:McNatt, J. D.<br>:<br>:<br>:                   | :USDA For. Serv. Res. Pap.<br>:FPL 254. 1975.<br>:<br>:<br>:                              |
| Producing flakes for structural particleboard on a ringhead planer.   | :Heebink, B. G.<br>:<br>:<br>:<br>:                                    | :USDA For. Serv. Res. Pap.<br>:FPL 246. 1975.<br>:<br>:<br>:                              |
| Product and process variables associated with a shaped particle beam.   | :Geimer, R. L., &<br>:Lehmann, W. F.<br>:<br>:<br>:                    | :For. Prod. J. 25(9):72-<br>:90. 1975.<br>:<br>:<br>:                                     |
| Engineering properties of structural particleboards from forest residues.                                       | :Geimer, R. L.,<br>:Lehmann, W. F., &<br>:McNatt, J. D.<br>:<br>:<br>: | :Proc. of Wash. State Univ.<br>:Particleboard Symposium<br>:119-143. 1974.<br>:<br>:<br>: |
| Screw withdrawal resistance of types A and AB sheet metal screws in particleboard and medium-density hardboard. | :Superfesky, M. J.<br>:<br>:<br>:<br>:<br>:                            | :USDA For. Serv. Res. Pap.<br>:FPL 239. 1974.<br>:<br>:<br>:<br>:                         |
| Basic properties of three medium-density hardboards.  | :Superfesky, M. J., &<br>:Lewis, W. C.<br>:<br>:<br>:                  | :USDA For. Serv. Res. Pap.<br>:FPL 238. 1974.<br>:<br>:<br>:                              |
| Oak-cottonwood plywood--Minimum cure time.  | :Jokerst, R. W., &<br>:Lutz, J. F.<br>:<br>:<br>:                      | :USDA For. Serv. Res. Pap.<br>:FPL 231. 1974.<br>:<br>:<br>:                              |
| Properties of particleboards at various humidity conditions.  | :McNatt, J. D.<br>:<br>:<br>:  | :USDA For. Serv. Res. Pap.<br>:FPL 225. 1974.<br>:<br>:<br>:                              |
| Elastic bearing constants for sheathing materials.  | :Wilkinson, T. L.<br>:<br>:  | :USDA For. Serv. Res. Pap.<br>:FPL 224. 1974.<br>:<br>:                                   |
| Particleboard from lodgepole pine forest residue.   | :Heebink, B. G.<br>:<br>:<br>:   | :USDA For. Serv. Res. Pap.<br>:FPL 221. 1974.<br>:<br>:                                   |

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|---|--|---|
| How species and board densities affect properties of exotic hardwood particleboards.                      | :Vital, B. R.,<br>:Lehmann, W. F., &<br>:Boone, R. S.<br>:<br>:  | :For. Prod. J. 24(12):<br>:37-45. Dec. 1974.<br>:<br>:<br>:         |
| Development in particleboard and other composite products.  | :Lehmann, W. F.<br>:<br>:<br>:                                   | :J. For. 72(11):706-<br>:708. Nov. 1974.<br>:<br>:                  |
| Properties of structural particleboards from Douglas-fir forest residues.                                 | :Lehmann, W. F., &<br>:Geimer, R. L.<br>:<br>:<br>:              | :For. Prod. J. 24(10):<br>:17-25. Oct. 1974.<br>:<br>:<br>:         |
| Cross-grain cutting with segmented helical cutters produces good surfaces and flakes.                     | :Stewart, H. A., &<br>:Lehmann, W. F.<br>:<br>:<br>:<br>:        | :For. Prod. J. 24(9):<br>:104-106. Sept. 1974.<br>:<br>:<br>:<br>:  |
| Influence of fiber alignment on stiffness and dimensional stability of high-density dry-formed hardboard. | :Steinmetz, P. E., &<br>:Polley, C. W.<br>:<br>:<br>:<br>:<br>:  | :For. Prod. J. 24(5):<br>:45-50. May 1974.<br>:<br>:<br>:<br>:<br>: |
| Effects of equilibrium moisture content changes on hardboard properties.                                  | :McNatt, J. D.<br>:<br>:<br>:<br>:                               | :For. Prod. J. 24(2)<br>:29-35. Feb. 1974.<br>:<br>:<br>:           |
| Hardboard: A potential outlet for waxed container waste.  | :Steinmetz, P. E.<br>:<br>:<br>:<br>:                            | :Tappi 57(2):74-77.<br>:Feb. 1974.<br>:<br>:                        |
| Properties of structural particleboards.  | :Lehmann, W. F.<br>:<br>:<br>:<br>:                              | :For. Prod. J. 24(1):<br>:19-26. Jan. 1974.<br>:<br>:               |
| Visual method for measuring formaldehyde release from resin-bonded boards.                                | :Harkin, J. M.,<br>:Obst, J. R., &<br>:Lehmann, W. F.<br>:<br>:  | :For. Prod. J. 24(1):<br>:27-30. Jan. 1974.<br>:<br>:<br>:          |
| Producing hardboards from red oak.  | :Steinmetz, P. E.<br>:<br>:<br>:<br>:                            | :USDA For. Serv. Res. Pap.<br>:FPL 219. 1973.<br>:<br>:             |
| Weathering characteristics of particleboard.  | :Geimer, R. L.,<br>:Heebink, B. G., &<br>:Hefty, F. V.<br>:<br>: | :U.S. For. Serv. Res. Pap.<br>:FPL 212. 1973.<br>:<br>:             |

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|---|---|--------|---|---|
| Factors affecting particleboard pressing time: Interaction with catalyst systems.           | :Lehmann, W. F., Geimer, R. L., & Hefty, F. V.  |        |   | :U.S. For. Serv. Res. Pap. :FPL 208. 1973.      |
| Resin efficiency and dimensional stability of flakeboards.                                  | :Lehmann, W. F., & Hefty, F. V.                 |        |   | :U.S. For. Serv. Res. Pap. :FPL 207. 1973.      |
| Basic engineering properties of particleboard.  | :McNatt, J. D.                                  |        |   | :USDA For. Serv. Res. Pap. :FPL 206. 1973.      |
| High-quality particleboard from cross-grain, knife-planed hardwood flakes.                  | :Stewart, H. A., & Lehmann, W. F.               |        |   | :For. Prod. J. 23(8): 52-60. Aug. 1973.         |
| Buckling due to linear expansion of hardboard siding.                                       | :McNatt, J. D.                                  |        |   | :For. Prod. J. 23(1): 37-43. Jan. 1973.         |
| Reducing particleboard pressing time: Exploratory study.                                    | :Heebink, B. G., Lehmann, W. F., & Hefty, F. V. |        |   | :U.S. For. Serv. Res. Pap. :FPL 180. 1972.      |
| Some views on large structural particleboard panels.  | :Heebink, B. G.                                 |        |   | :U.S. For. Serv. Res. :Note FPL-0220. 1972.     |
| Moisture-stability relationships in wood-base composition boards.                           | :Lehmann, W. F.                                 |        |   | :For. Prod. J. 22(7): 53-59. July 1972.         |
| Irreversible dimensional changes in panel materials.  | :Heebink, B. G.                                 |        |   | :For. Prod. J. 22(5): 44-48. May 1972.          |
| Board materials from wood residues.   | :Lewis, W. C.                                   |        |   | :U.S. For. Serv. Res. :Note FPL-045. Rev. 1971. |
| Simulated service testing of wood and wood-base finish flooring.                            | :Lewis, W. C.                                   |        |   | :U.S. For. Serv. Res. :Note FPL-0215. 1971.     |
| Resin efficiency in particleboard as influenced by density, atomization, and resin content. | :Lehmann, W. F.                                 |        |   | :For. Prod. J. 20(11): 48-54. Nov. 1970.        |
| Particleboard.  | :Forest Products Laboratory                     |        |   | :U.S. For. Serv. Res. :Note FPL-072. Rev. 1969. |

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|---|--|--|
| Treatments to reduce thickness swelling of phenolic-bonded particleboard.           | :Heebink, B. G., &<br>:Hefty, F. V.<br>:<br>:<br>:   | :For. Prod. J. 19(11):<br>:17-26. Nov. 1969.<br>:<br>:<br>:          |
| Exploratory investigations of fire-retardant treatments for particleboard.          | :Syska, A. D.<br>:<br>:<br>:<br>:  | :U.S. For. Serv. Res.<br>:Note FPL-0201. 1969.<br>:<br>:<br>:        |
| Surfacing softwood dimension lumber to produce good surfaces and high value flakes. | :Lutz, J. F.,<br>:Heebink, B. G.,<br>:Panzer, H. R.,<br>:Hefty, F. V., &<br>:Mergen, A. F.<br>:<br>: | :For. Prod. J. 19(2):<br>:45-51. Feb. 1969.<br>:<br>:<br>:<br>:<br>: |
| Resin treatments for improving dimensional stability of structural fiberboard.      | :Steinmetz, P. E., &<br>:Fahey, D. J.<br>:<br>:<br>:   | :For. Prod. J. 18(9):<br>:71-75. Sept. 1968.<br>:<br>:<br>:          |
| Long term durability of Laboratory-made Douglas-fir flakeboard.                     | :Jokerst, R. W.<br>:<br>:<br>:<br>:  | :U.S. For. Serv. Res.<br>:Note FPL-0199. 1968.<br>:<br>:<br>:        |
| Portable apparatus for measuring surface irregularities in panel products.          | :Hefty, F. V., &<br>:Brooks, J. K.<br>:<br>:<br>:  | :U.S. For. Serv. Res.<br>:Note FPL-0192. 1968.<br>:<br>:<br>:        |
| Steam post-treatments to reduce thickness swelling of particleboard.                | :Heebink, B. G., &<br>:Hefty, F. V.<br>:<br>:<br>:   | :U.S. For. Serv. Res.<br>:Note FPL-0187. 1968.<br>:<br>:<br>:        |
| Thick particleboards with pulp chip cores--Possibilities as roof decking.           | :Heebink, B. G., &<br>:Lewis, W. C.<br>:<br>:<br>:   | :U.S. For. Serv. Res.<br>:Note FPL-0174. 1967.<br>:<br>:<br>:        |
| Thermal conductivity of wood-fiber and particle panel materials.                    | :Lewis, W. C.<br>:<br>:<br>:<br>:  | :U.S. For. Serv. Res.<br>:Pap. FPL 77. 1967.<br>:<br>:<br>:          |
| Influence of component variables on properties of particleboard for exterior use.   | :Gatchell, C. J.,<br>:Heebink, B. G., &<br>:Hefty, F. V.<br>:<br>:                                   | :For. Prod. J. 16(4):<br>:46-59. Apr. 1966.<br>:<br>:                |

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| Free-close molding versus molding to stops in wood-resin blend processing.                  | :Gatchell, C. J., &<br>:Heebink, B. G.<br>:<br>:<br>:           | :U.S. For. Serv. Res.<br>:Note FPL-0103. 1965.<br>:<br>:<br>: |
| Board materials from wood residues.   | :Forest Products<br>:Laboratory<br>:<br>:                       | :U.S. For. Serv. Res.<br>:Note FPL-045. 1964.<br>:<br>:       |
| Effect of particle geometry on properties of molded wood-resin blends.                      | :Gatchell, C. J., &<br>:Heebink, B. G.<br>:<br>:<br>:           | :For. Prod. J. 14(11):<br>:501-506. Nov. 1964.<br>:<br>:<br>: |
| Linear movement of plywood and flakeboards as related to the longitudinal movement of wood. | :Heebink, B. G.,<br>:Kuenzi, E. W., &<br>:Maki, A. C.<br>:<br>: | :U.S. For. Serv. Res.<br>:Note FPL-073. 1964.<br>:<br>:       |

#### Miscellaneous Publications

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| Fire-retardant treatments for dry-formed hardboard.                            | :Myers, G. C., &<br>:Holmes, C. A.<br>:<br>:                           | :For. Prod. J. 24(1):<br>:20-28. 1975.<br>:<br>:  |
| Durability of adhesives in plywood: Dry-heat effects by rate-process analysis. | :Gillespie, R. H., &<br>:River, B. H.<br>:<br>:<br>:                   | :For. Prod. J. 25(7):<br>:26-32. 1975.<br>:<br>:<br>:   |
| Fire endurance of wood-frame and sandwich wall panels.                         | :Eickner, H. W.<br>:<br>:<br>:<br>:                                    | :J. Fire and Flammability<br>:Vol. 6, p. 155-190.<br>:1975.<br>:<br>:   |
| Wood-base building materials: Rate of heat release.                            | :Brenden, John J.<br>:<br>:<br>:<br>:                                  | :J. Fire and Flammability<br>:Vol. 6, p. 274-293.<br>:1975.<br>:<br>:   |
| How nine inorganic salts affected smoke yield from Douglas-fir plywood.        | :Brenden, John J.<br>:<br>:<br>:<br>:                                  | :USDA For. Serv. Res.<br>:Pap. FPL 249. 1975.<br>:<br>:   |
| New life for old dwellings: Appraisal and rehabilitation.                      | :Sherwood, Gerald E.<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>:<br>: | :USDA For. Serv. Agric.<br>:Handbook No. 481, 99 p.<br>:1975. This handbook<br>:is available for \$1.70<br>:from the Superintendent<br>:of Documents, Government<br>:Printing Office,<br>:Washington, D.C. 20402.<br>:<br>: |



